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ABSTRACT

This study assessed the attitudes of three groups that participated in Upward Bound, a newly instituted academic advisory program at Tomball High School in Texas. It also provided a baseline of data to measure students' academic performance. The three groups, 300 high school freshmen, 115 of their parents, and 33 full time faculty, responded to Likert-type and open-ended questions. Overall, attitudes of parents and students were mixed. Sponsors cited the program's potential for establishing group cohesion among freshman students. Some benefits were reported in study skills and, to a lesser degree, interpersonal skills. However, an improvement in first semester Algebra 1 and English 1 grades was not realized when comparing this year's freshman class (participants of academic advisory) with last year's freshman class (non-participants). Areas cited by sponsors and parents as needing improvement are communication, planning, structure and relevancy of curriculum, format of academic advisory (activities and study period), and teaming; staff development (on advisory role) is needed. Parents and students tended to agree that the concept of academic advisory is good, but preferred another content elective and suggested that academic advisory be exclusively for students with low self-esteem. (Contains 36 references.) (Author/JE)

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ED 385 799

An Evaluation of Customers' Opinions of an Academic Advisory Program for High School Freshmen

A Thesis Presented to the
Graduate Faculty of the College of Technology
Industrial Technology Department
University of Houston

In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Occupational Technology

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by
Stephen Koszewski

May 1994

CG026304

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An Evaluation of Customers' Opinions

of an Academic Advisory Program

for High School Freshmen

A Thesis for the Degree

Master of Science

by

Stephen Koszewski

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ABSTRACT

This study assessed the attitudes of three customer groups who participated in a newly instituted academic advisory program at the secondary school level. Secondly, it provided a baseline of data to measure students' academic performance.

The customers, 300 of 412 freshmen students, 115 of their parents, and 33 fulltime faculty (16 academic advisory sponsors and 17 others) who taught primarily freshmen responded to a researcher-developed, five point, Likert-type scale which contained 15 statements. Open-ended questions were also included.

Parents (m=3.58) and students (m=2.56) differed significantly only on the value of an all day orientation program for students. Overall, attitudes of parents and students were mixed. Sponsors were optimistic and cited the program's potential for establishing group cohesion among freshmen students.

Some benefits were reported in study skills and to a lesser degree, interpersonal skills. However, an improvement in first semester Algebra 1 and English 1 grades was not realized when comparing this year's freshman class (participants of academic advisory) with last year's freshmen class (non-participants).

Areas cited by sponsors and parents as needing improvement are communication, planning, structure and relevancy of curriculum, format of academic advisory (activities and study period), and teaming; staff development (on advisory role) is needed.

Parents and students tended to agree that the concept of academic advisory is good, but gave reasons for not wanting to do it over again. They preferred another content elective and suggested that academic advisory be exclusively for students with low self-esteem.

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CHAPTER I

INTRODUCTION

Importance of the Problem

Systemic changes in high schools are needed to catch up to the changes in the world of work. In the opening letter to parents, employers, and educators in The Secretary's Commission on Achieving Necessary Skills, (SCANS, 1991) Lynn Martin, Secretary of Labor, discusses the fact that as companies strive to become high performance organizations committed to excellence, product quality, and customer satisfaction, so must schools. There is a mandate for schools to produce skilled graduates as the norm, not the exception. This reference to schools does not imply that other stakeholders, parents, employers, and students, are exempt from participating in this mandate. The fact that the SCANS Report is addressed to them underscores the need for partnerships to rebuild schools.

According to a report published by the Commission on the Skills of the American Workforce (1990), the United States has the worst school-to-work transition system in the industrialized world. The high school dropout rate is four times higher than any other industrial nation, while the four year college dropout rate is 58% compared to 11% in

other industrialized nations (Saving America's Children, 1992).

The Nation's Task

By the year 2000, 20% of careers will require a four year degree; 80% will require postsecondary studies beyond high school, but less than a baccalaureate degree (U.S. Department of Labor and Education, 1990). The goal of Tech Prep, funded by the Carl D. Perkins Applied Technology Act, is to target the 60% of high school students, called the "neglected majority" (Parnell, 1984), who graduate with neither college prep skills nor vocational skills and to prepare them for the jobs of the future. These jobs are in computers, telecommunications, health occupations, intelligent buildings, instrumentation and control, lasers, biotechnology, agribusiness and other high technology areas. Dr. Leno Pedrotti, Senior Vice President and Chief Scientist for the Center for Occupational Research and Development (CORD) stated at a workshop (1993), "These are jobs requiring both head skills and hand skills."

Because of the fierce competition in the global market, educational reform is critical to our nation's survival. Noted economist Lester Thurow, in Head to Head, writes about the importance of having an educated workforce.

> The skills of the laborforce are going to be the competitive weapon in the twenty-first century. If the route to success is being the cheapest and best

> producer of products, new or old, the education of the bottom 50% of the population moves to center stage. To learn what must be learned, every worker must have a level of basic mathematics that is far beyond that achieved by most American high school graduates (Thurow, 1992, p. 51-52).

In the 1991 report from The Secretary's Commission on Achieving Necessary Skills (SCANS), The United States has taken steps to remain competitive by stating what skills and personal qualities are needed for solid job performance. The five competencies include: 1) identifying, organizing, planning, and allocating resources, 2) working with others, 3) acquiring and using information, 4) understanding complex inter-relationships, and 5) working with a variety of technologies. These competencies are complemented with a three part foundation of basic skills, thinking skills, and personal qualities.

The state of affairs in vocational education may make it difficult to take a quantum leap toward quality. A lack of accountability, the absence of national performance indicators, and an image problem, have created a period of uncertainty for vocational education. In 1991, Betsy Brand, Assistant Secretary for Vocational and Technical Education, warned vocational educators about the possibility of losing support from Congress and the administration if practitioners don't emphasize quality and demonstrate that funds are being used effectively (Gardner, B & Reinhard, B,

1991). The current Secretary of Labor, Robert Reich, voiced similar sentiments ("Ross Supports," 1993) when he suggested a funding freeze for JTPA (Job Training Partnership Act) and Vocational Education until more is known about their effectiveness.

The Vision of Tomball High School

Within the school walls, the challenges are equally as difficult. Systemic change in schools requires more than just rhetoric and the creation of new committees. It is a process that begins with effective leadership to raise expectations for all- students, teachers, parents, counselors, administrators, and the entire community. With any successfully implemented organizational development program, what follows is a change in attitude. Then, each component, whether it is staff development, career counseling activities, or curricula, must be assessed and goals realigned collectively to create a high school that really works. According to Gene Bottoms (July, 1993), Executive Director of the Southern Regional Education Board, this change can be accomplished within 3-5 years in a small to medium size high school. The rational for selecting Tomball Senior High School as one of the 12 High Schools That Work pilot sites in Texas was based on several reasons, including plans already in place to phase in two programs for the class of 1997, called Pathways and Upward Bound.

Pathways and Upward Bound programs are designed to improve student performance. The goals of these programs are 1) to establish mutual expectations between school, student, and home; 2) prepare students to succeed; and 3) provide career exploration and counseling. These goals are clearly expressed in another way in the mission statement of Tomball Senior High School, which is "To improve student performance, build life-long learners, and set the standard for excellence." These programs lay the foundation for what is to be accomplished in High Schools That Work and will be referred to later in the chapter.

Southern Regional Education Board

The Southern Regional Education Board-State Vocational Education Consortium (SREB) is a partnership of school systems and school sites, within a geographical region of nineteen states* united in a effort to raise the achievement level of career-bound high school students. Launched in 1987 with twenty-eight pilot sites in thirteen states, the Consortium now encompasses 300 sites.

In 1993, 12 Texas high schools, including Tomball Senior High School, located northwest of Houston, were

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*SREB states: Alabama, Arkansas, Delaware, Florida, Georgia, Indiana, Kansas, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

selected as pilot sites in the Consortium's High Schools That Work program. High Schools That Work is an educational reform initiative based on the belief that career-bound students can master complex academic and technical concepts if schools create an environment that encourages success. The accomplishments of the Southern Regional Education Board are impressive. According to Gene Bottoms (1993), from 1988 to 1990, vocational education students at 13 southern schools that initiated High Schools That Work increased their average reading scores from 50.7 to 54.4; mathematics from 284.5 to 290.3; and science from 254.7 to 278.9 on the National Assessment of Educational Progress (NAEP). Also encouraging are the findings of the Southern Regional Education Board that more vocational education students reported that courses were more challenging in 1990 than in 1988.

Southern Regional Education Board Key Practices

High Schools That Work identified nine key practices aimed at helping students in general and vocational programs master higher-level academic content. According to the Southern Regional Education Board, these key practices have the potential to create a learning pattern that enables students to make a connection between abstract academic studies and actual problems, tasks, and situations encountered in the workplace.

The nine key practices (Bottoms, Presson, & Johnson, 1992) for accelerating student achievement are listed below.

- Establish higher expectations for students in academic and vocational courses.
- Revise and develop vocational courses to emphasize math, science, and communication competencies, and cognitive, intellectual, and problem-solving skills.
- Revise and develop academic courses to teach concepts from the college prep curriculum through functional, applied strategies that enable students to see the relationship between course content and the future.
- Require students in general and vocational studies to complete a challenging program of study that includes three credits in math and three in science, with at least two credits in each course equivalent to college prep courses; four courses in a vocational major; and two courses in related areas.
- Encourage academic and vocational teachers to integrate curriculum and instruction by providing them with staff development, materials, and time to work together.
- Revise the instructional process so that students are actively engaged in learning.
- Provide guidance and counseling services to help students connect what they learn in school with their goals for the future, and to involve parents in developing and updating a planned program of study.
- Provide extra help to enable students to complete a program of study that includes high-level academic content.
- Participate in program evaluation and use student assessment data to check and improve the curriculum, instruction, school climate, and school organization and management.

Pathways

The purpose of Pathways is to eliminate the general track curriculum. It offers students three distinct, but flexible, alternatives: a 4+4 (University Prep), 4+2 (Tech Prep) and a 4 year (Workforce Prep) course of studies. All students will receive a strong foundation in mathematics, English, and science. The difference in the paths is in the way students are taught. The University Prep curriculum is the traditional college preparation program, while the Tech Prep and Workforce Prep Paths use contextual learning methods.

Upward Bound: The Academic Advisory Program

The phasing in of Upward Bound was made possible by the modified eight block schedule (1 1/2 hour classes on alternate days), allowing Upward Bound to be inserted into the first semester schedule as a required half credit elective for all freshmen.

The Upward Bound curriculum and format is designed to help each student recognize, develop, and capitalize on personal strengths by discovering, examining, and evaluating his/her educational purpose and career goals. As an initiation into Pathways, Upward Bound prepares its customers, students, their parents, and faculty, for curriculum changes and for a new way to learn and teach.

To achieve these goals, teachers (hereafter referred to as sponsors) assume the role of an advisor, facilitator, and

instructor. A peer forum allows students opportunities to give input.

These advisory topics start with an orientation to the many high school procedures and the student handbook, including use of the computer lab and library, graduation requirements, credits, GPA (Grade Point Average), and RIC (Rank in Class). Study skills taught include learning styles inventory, organization and time management skills, Sustained Silent Reading, test taking skills, and presentation skills. Interpersonal skills practiced are team building, listening, talking on the telephone, persistence, and other skills. Students learn all of the above, orientation, study skills, interpersonal skills, working in groups indoors and outdoors using team building exercises, games, skits, and other non-traditional methods. Students also keep a journal ("I'm Wonderful" Portfolios) about their personal experiences. A portion of the class is dedicated to study and completion of homework assignments.

Activities programmed prior to the first day of school for Upward Bound customers included an orientation for parents on Upward Bound and Pathways and an all-day, entertaining and informative "Fish Camp" (the majority of freshman students attended) that helped to erase some of the fears of freshmen. Staff development for sponsors included a Teacher Academy led by Dr. Jerome Freiberg based on a text he co-authored, Universal Teaching Strategies (1993), and a team building workshop.

The Statement of the Problem:

The question of what customers think about a new program that introduces change is important and can be a valuable source of feedback to all stakeholders. Secondly, it will provide a baseline of data from which to measure the effects of Upward Bound on students' academic performance. Because there are different variables impacting the problem, this study will investigate them from several perspectives as outlined in the research questions.

Purposes of the Study

The purposes (3) of the study include the following:

1. Provide feedback to Tomball Independent School on customers' opinions about Upward Bound.
2. Assess the effectiveness of Upward Bound in its early stages of implementation.
3. Recommend any needed changes in Upward Bound.

Research Questions

The research questions (5) include the following:

1. Did customers understand the purpose of Upward Bound?
2. Did Upward Bound have a positive impact on establishing mutual expectations between school, student and home?
3. Did students apply what was taught in Upward Bound in other classes?

4. To what extent was Upward Bound effective in improving student performance?
5. What was the reaction of customers to Upward Bound and its activities?

Limitations

The limitations (2) of the study include the following:

1. The study is limited to the population of Tomball Senior High School Class of 1997 (freshmen), their parents, and faculty (who taught primarily freshmen) of the Tomball Independent School District, located in Harris and Montgomery Counties in the State of Texas.
2. This study is limited to Tomball Senior High School and the programs provided during the first semester of the 1993-94 school year.

Delimitations

The delimitations (5) of the study include the following:

1. The respondents to the study may exhibit bias when answering attitude questions.
2. Upward Bound concluded its first 18 weeks of instruction and program activities. Therefore, it may be premature to determine the effectiveness of Upward Bound.
3. Comparison data of an equivalent control group is not available.

4. The type of research is educational and is limited to the use of descriptive statistics.
5. This study reports results within and among the three groups. The opinions among the three groups are compared using a method corresponding to their point of reference. The opinions of freshmen and parents were an individual point of reference, whereas the faculty's opinions were based on many students and parents. Therefore, students' and parents responses are compared using a statistical test to determine if the scores are significantly different. Faculty responses are reported separately. Group comparison analysis is used to report on the similarities and differences of three groups.

Assumptions

The assumptions (3) of the study include the following:

1. Even though customers (students, parents, and faculty), may possess a different perspective of Upward Bound, they perceive themselves as stakeholders with opinions to express on the program.
2. Attitudes toward Upward Bound can be determined by surveying and comparing the responses of customers.
3. Students' academic performance is relevant to assessing Upward Bound and it is included in this study.

Definitions

These definitions pertain to this body of research:

Assessment A data-gathering strategy for measuring knowledge, behavior, performance, or attitude.(Freiberg & Driscoll, 1992).

Customers This study defines the internal customers as the students and faculty. External customers are parents and other community members (Byrnes, M., Cornesky, R., & Byrnes, L., 1992). Whether one considers the product the curriculum, or the high school graduate, the term 'customer' indicates that a close-knit relationship must exist to produce a quality product.

Evaluation The determination of the worth of a thing. It includes obtaining information for use in judging the efficacy of the program, product, procedure, objective or the potential utility of alternative approaches designed to attain specific objectives (Worthen & Sanders, 1973).

Focus components The focus areas of any program's evaluation. The specificity of the components will vary depending on the program being evaluated. Examples of focus components are facilities and equipment, students, and faculty (Wentling, 1975).

Inquiry The process (similar to a customer satisfaction survey) of specifically asking students, and other participants how they feel, what they think, what their likes and dislikes are, and probing their understanding about a class or activity. (Freiberg & Driscoll, 1992).

Performance indicators A series of indices, sometimes called program performance measures (Hoachlander, 1991), used to comprehensively measure the quality, effectiveness, and goal attainment of an educational program (National Assessment of Vocational Education, 1989).

Performance Standard The actual level of attainment required of the program performance indicator (Hoachlander, 1991) stated in quantifiable terms, such as, all students must have a minimum of a 3.0 GPA on a 4.0 scale.

School-to-work-transition system A term used to describe the national structure in place to prepare students for work and or college that formally begins in secondary schools. Examples include the following: youth apprenticeships, cooperative education, International Baccalaureate Program, Tech Prep, school-based enterprises, career academies, vocational technical schools, vocational student organizations, youth community service, mentoring, and internship.

Stakeholder Individual with an interest in the finished product who may contribute voluntarily or involuntarily (direct or indirectly) to the costs of public education, on the community, state and national level. These are students, parents, teachers, counselors, school administrators, superintendents, school board members, college presidents, taxpayers, and employers.

Tech Prep Funded by the Carl D. Perkins Vocational and Applied Technology Act Amendments of 1990, Tech Prep is a combined secondary and postsecondary program which 1) leads to an associate degree or two year certificate; 2) provides technical education in at least one field of engineering technology, applied science, mechanical, industrial, or practical art or trade, or agriculture, health, or business; 3) builds student competence in mathematics, science, and communications (including applied academics) through a sequential course of study; and 4) leads to placement in employment.

Review of Related Literature

Overall, formal programs of quality assurance have not characterized the field of education. There is, however, a history of attempts to evaluate schools and to hold school personnel accountable for the education of children (Madaus, G. & Stufflebeam, 1984). The attempts to create a degree of accountability in secondary vocational education are described below at the national, state and program levels.

National Measures and Standards

After over 30 years of attempting to establish nationally adopted measures and standards in 1) gains in skills, knowledge, and attitudes, 2) employment, earnings, and further education, and 3) general social educational and economic benefits, secondary vocational education may finally be moving toward a comprehensive evaluation model. It includes academic achievement in mathematics and reading as measured on standardized tests, graduation rates, and occupational competency as measured on competency-based testing (Hoachlander, E. & Rahn, M., 1992).

Improving accountability is a major objective of the Carl D. Perkins Vocational and Applied Technology Act; however, the literature points out that it will not be easily accomplished. The following quote summarizes the reality of the current system.

> Systems design will be difficult as few states have previous experience with performance measures. In most

states, evaluation systems tend to be compliance oriented and lack purposeful, functional links between substantive planning and comprehensive evaluation (Strickland & Asche, 1987).

The passage of the Carl Perkins Vocational and Applied Technology Act of 1990 provided federal support for Tech Prep. As part of the legislation, the Secretary of Education was required to submit a report on the effectiveness of the program at the end of the first cycle of federal funding. Mathematica Policy Research, Inc.(1993) and its contractor, Northwest Regional Educational Laboratory, received a contract to conduct a national evaluation of Tech Prep. The state of Texas is in the initial stages of participating in the survey.

This evaluation has two primary objectives. First, it will describe the Tech Prep Programs funded under the Perkins Act. It will gather data on the number of programs, their characteristics, the institutions involved, the populations they serve, and their planning and implementation strategies. Secondly, it will identify effective practices of mature programs and developing programs with strong formulated designs. The evaluation will also measure the progress of Tech Prep students in high school and in the postsecondary stage of the program and compare their progress with that of similar students not involved in Tech Prep.

The five-year evaluation will have three data collection components: 1) A survey of state-level Tech Prep coordinators to document the state role in funding and guiding the development of Tech Prep Programs conducted in the fall of 1993 and 1996; 2) A survey of local Tech Prep programs, conducted annually for four years beginning in the fall of 1993 to document their characteristics and development; and 3) In-depth studies of selected local programs conducted annually for four years beginning in the 1993-94 school year to identify and document how successful programs have been planned, designed, and implemented.

Accountability and Texas

Texas came into compliance with the Perkins Act in the updated Master Plan for Career and Technical Education (April, 1993). The Executive Summary of the Plan states:

> Success will be measured consistently in terms of skill demonstration, program completion/graduation rates, and pursuit of additional education or training. Second, success will be measured by job placement related to training, earnings, and progression along career paths to high skill/high wage jobs (p. 8).

These outcomes are tied to the state's Academic Excellence Indicator System and Results-Based Monitoring, which include standards in several areas. The central point here for both college bound and vocational education is that Local Education Agencies must develop their own strategies

to produce a quality school system. Standards without the strategies to reach them are impossible to meet.

A contract has been awarded to Decision Information Resources (DIR) of Houston (1993) to evaluate Tech Prep activities in the state. The evaluation includes: 1) a descriptive analysis on the 25 Tech Prep consortia in implementing Tech Prep as they currently operate; 2) an evaluation of the delivery, usage, and perceived quality and utility of consortia programs; and 3) a description and assessment of program administration issues, especially in relation to program definition, future monitoring, consortia administrative difficulties and adequacy of the current organizational structure of the overall consortia program.

Accountability at the Program Level

An ERIC search of 35 publications using the descriptors "Tech Prep and evaluation" revealed some evidence of the use of formal, program specific evaluations. However, the majority of these were limited to a discussion of best practices found in Tech Prep. Dr. Maurice Dutton (Nov., 1993), director of special programs for the National Tech Prep Network tended to support this finding. He stated, "Evidence of evaluation among programs is sketchy. After being told that Tomball High School was a Southern Regional Education Board pilot site, he added, "About the only group doing comprehensive site evaluations is the Southern Regional Education Board."

Dutton (Nov., 1993) also stated key characteristics of an evaluation model for Tech Prep. These include: simple, understandable and usable; cost-effective (time and money), meets and exceeds Perkins Act and State requirements; dynamic, identifies expected outcomes; quantifiable, transferable, formative and summative, and links planning and evaluation. Dutton (Nov., 1993) also commented about evaluation in general. He said, "Evaluation is the job of administration and it also serves administrators; it requires specificity and clarity regarding outcomes and identifying sources of data."

The doctoral dissertation of Frank Hammons (1992) contributed to the important task in determining Tech Prep program quality, effectiveness, and goal-attainment. The results of a survey of sixty-seven Tech Prep program directors and coordinators in the southeastern United States and Puerto Rico, supported the conclusion that agreed upon performance indicators are available for comparison and evaluation of Tech Prep programs. These findings are in contrast to the current literature on the subject of the lack of consensus on key performance indicators. Program performance indicators were grouped into six focus components. Hammond (1992) reported that the Students focus component is perceived By Tech Prep directors and coordinators as most important, the Resources focus component is least important, and Careers, Professional

Development, Attitude/Perceptions, and Facilitators focus components are deemed equally important.

The literature search revealed one formal evaluation model in the Indiana Tech Prep Training Manual (Greenan, & Jarwan, 1992) recommended to program administrators, the CIPP (Context, Input, Process, and Product) Model developed and pioneered by Stufflebeam (1983).

Overall, the literature cited several reasons why Tech Prep programs should develop a system of accountability. Given the current status of Tech Prep, it appears that locally developed models are most appropriate. It has been called a divergent practice, a reform movement, embryonic, revolutionary, a philosophical mind-set, among many other adjectives. According to Sandra Furey (Sept., 1993), project specialist with the U.S. Department of Education Office and Planning, Tech Prep means different things to different people, within regions and among states. Furey commented that the finding of State Tech Prep Coordinators (at a 1993 conference) was that no one definition of Tech Prep exists. For example, she said, "Some programs do not integrate academic and vocational education, a requirement stated in the Carl Perkins Act."

The reasons, then, why programs may not be conducting formal, program specific evaluations are many. Vocational Education has a poor record of conducting formal evaluations. Performance indicators are not yet agreed upon. Tech Prep programs are new and different across the country.

Meanwhile, schools continue to assess overall student performance based on outcomes in several areas.

Procedures used by Southern Regional Education Board in its evaluation of 300 sites in 19 states involve data gathering from multiple sources: annual National Assessment Educational Progress test results of students, a comprehensive survey questionnaire of vocational completers and all teachers, and a two day, on-site visit by Southern Regional Education staff and representatives from other High Schools That Work school sites. These visits stress technical assistance and focus on the Southern Regional Education Board key practices. This approach reduces the likelihood that the school will "dress itself up for a show", according to Alice Presson, Associate Director (1993).

Quantitative and qualitative data of Southern Regional Education sites is helpful in assessing the effectiveness of restructuring efforts. A comparison (Comparative analysis, 1993) of students who took the National Assessment of Educational Progress exam at Old High Schools That Work Sites in 1990 and 1993 show these patterns:

* More females, minorities, and trade and technical students are vocational completers.
* Most sites reported improved retention rates.
* Some declining sites reported poor test taking conditions.
* Amount of homework did not change.

* Vocational teachers made little progress in stressing academics.
* Fewer students reported their courses were challenging and exciting.

Summary of Review of Related Literature

In summary, the literature states a trend to design, develop and implement sound accountability measures on several levels. At present, evaluations are sparse, rely primarily on outcomes and standardized tests, generally are done for compliance, are politically motivated and do not link planning to evaluation. National efforts to employ performance standards will be difficult and will rely on local quality assurance measures. Current national and state evaluation designs are primarily descriptive in nature, which reflect the embryonic stage of Tech Prep. More consensus is needed in determining performance indicators. Assessment and evaluation activities at the site level are very important at this stage, but it appears Tech Prep programs are not able to produce results on effectiveness. Southern Regional Education Board data show a consistent practice of site-based assessment and evaluation involving multiple sources and may be a model for others to learn from.

CHAPTER II

METHODS AND PROCEDURES

Design of the Study

This section contains the following: Overview, Survey Questionnaire, Group Comparison Analysis, and Student Performance Records.

Overview

This research seeks to explain, predict, and/or control educational phenomena. Descriptive research methodology is used to report on the way things are in a public school setting after the completion of a one semester academic advisory program called Upward Bound. The design of the study includes a survey questionnaire, group comparison analysis of the survey results, and a examination of student performance records using the only available data- passing grades in core subjects.

Survey Questionnaire

Using a survey questionnaire, this study will examine the attitudes of three groups who make-up the customers of Upward Bound: ninth grade Upward Bound students, their parents, and faculty of Tomball Senior High School.

Group Comparison Analysis

This study reports results within and among the three groups. The opinions among the three groups are compared using a method corresponding to their point of reference. The opinions of freshmen and parents were an individual point of reference, whereas the faculty's opinions were based on many students and parents. Therefore, students' and parents responses are compared using a statistical test to determine if the scores are significantly different. Faculty responses are reported separately.

Student Performance Records

This study will compare first semester grades (Algebra 1 and English 1) of two freshmen classes (Class of 1996 vs. Class of 1997) from Tomball Senior High School. The independent variable is the effects of Upward Bound on student performance. Only the Freshman class of 1997 was exposed to Upward Bound. This comparison is relevant because student success in school is one of the goals of Upward Bound; and secondly, it establishes a baseline of data about academic performance.

Procedures and Instrumentation

This section contains the following: Overview, Design of Survey Questionnaire, Likert-type Statements, Checklist of Skills, Open-ended Questions, and Demographic Data.

Overview

Clearance to conduct the study was obtained verbally though the Principal and the Superintendent. Sources of data were obtained from official school records. Twenty freshmen students piloted the survey. The survey was administered in January after the end of the first semester. (The program was a one semester course). The cover letter explained the purpose of the survey and guaranteed anonymity. Every reasonable measure was taken to secure a high rate of return.

Faculty response was 100%, or 33 of 33. Factors contributing to a return rate of 72% for students (300 of 412) and 25% for parents and or guardians (115 of 412 households) were the following: a 7% student absenteeism rate during the period of data collection, a turnover rate of 33% in enrollment for the school year, changes in Upward Bound classroom assignments, and the lack of a follow-up mail-out to non-respondents.

Design of Survey Questionnaire

An anonymous survey questionnaire, or inquiry assessment, was developed for each group to meet the special conditions of the project. Closed-ended and open-ended questions were used.

Likert-Type Scale Statements

A total of 15, five-point, Likert-type scale (5-Strongly Agree, 4-Agree, 3-Undecided, 2-Disagree, 1-Strongly Disagree) statements were made. Statements on the three surveys were constructed differently for each group, but they asked for an opinion on an identical issue.

Checklist of Skills

Students and faculty were given a list of seven skills (note taking, interpersonal skills, managing time, test taking, presenting in class, reading, and working in groups) taught in Upward Bound. Both groups were asked to state (YES or NO) whether these skills were applied in other classes (English, science, etc.). This involves the method of self-reporting and is based on the respondents' perception of their skills.

Open-ended Questions

Open-ended questions permitted free expression of opinions and sought the reason for a positive, negative or conditional response (e.g., What was the greatest benefit of Upward Bound?)

Demographic Data

The student and parent survey requested the gender of the respondent and the faculty survey status of faculty involvement (Upward Bound sponsor YES/NO).

Data Sources

This section contains the following: Background Data on Tomball I.S.D., and Description of Customer Groups: Students, Parents, and Faculty.

Background Data on Tomball I.S.D.

Tomball I.S.D. is located in Harris County northwest of Houston, and is considered rural-urban. According to the Academic Excellence Indicators System District Report (1992-93), total enrollment in Tomball I.S.D. is 5,373 students (88.4% white; 6.8% Hispanic; 4.1% African American; and 0.7% Other). Tomball I.S.D. is categorized as above average in wealth and below average in students deemed economically disadvantaged.

Description of Customer Groups

Students

The Class of 1997 (N=412) were those ninth grade students who were scheduled into one of 17 sections, or classes, of Upward Bound. This number excluded approximately 30 "second year" freshmen who lacked sufficient credits to be counted as 10th graders and were considered in the ninth grade.

Parents

All parents and/or guardians (one per household was targeted) of ninth grade Upward Bound participants whose names appeared on the official school roster were considered a group. Last spring, parents were invited to a orientation on both Upward Bound and Pathways programs. At the beginning of the semester, letters authored by sponsors were sent home explaining more about Upward Bound. The program was publicly presented at a district-wide parent advisory committee meeting. And at the end of the first semester, sponsors gave freshman parents a brief overview of the program's activities.

Faculty

According to the Academic Indicators Excellence System District Report (1992-93) of Tomball I.S.D, teachers are predominately female (57%). The overwhelming majority of faculty members are White. The percentage of teachers holding no degree is 0.6; The majority of teachers have a bachelor's degree (69.5%). Approximately twenty percent of the teachers hold an advanced degree (Masters, 28.9% & Doctorate 1%).

A total of 33 full-time teachers who primarily taught freshmen participated in the study. Of this group, 16 sponsored one of the 17 Upward Bound sections; one sponsored two sections. All sponsors were volunteers and participated in staff development. They were also assigned to teach a

regular subject from one of these disciplines: Humanities, English, Mathematics, Science, and Fine Arts. The 17 teachers (referred to as other faculty) surveyed in the study primarily taught freshmen and represented a cross section of the disciplines stated above and these others: Special Education and Career and Technology Education.

Data Collection Methods

This section contains the following: Administering the Survey Questionnaire and Examining Student Performance Records.

Administering the Survey Questionnaire

The data for this study were collected in January of 1994 (two weeks after the end of the first semester). The student survey was administered in class during the school day. Teachers were instructed to read aloud a brief statement about the purpose of the survey. A sample Likert-type scale and open-ended question were reviewed by the teacher to ensure that all students understood the format. Confidentiality was guaranteed and adequate time was given to complete the survey. After the allotted time of 15 minutes, all surveys were collected regardless of the degree of completeness.

Teachers were surveyed during staff development activities to ensure a high rate of return following similar procedures.

Parents were administered the survey in a group at a Freshmen Parent Meeting Night in mid-January and by a mail-out. All parents were asked to sign-in at the meeting. The ninth grade class roster was used to check-off those in attendance. All others were mailed the identical survey on the following day.

Examining Student Performance Records

An official grade report printout of the 1992-93 and 1993-94 freshmen classes was used to compare students' academic performance based on the percentage of passing grades after the first semester on two subjects- Algebra 1 and English 1.

Data Analysis Methods

Univariate analysis of the responses involved descriptive statistics. Frequencies and percentages were computed for all items on the scale. The 15 Likert-type statements were grouped by issue to facilitate a discussion of the data. When appropriate, comparisons of the averaged means (grand mean) was done within and among groups. The mean differences of the Student Group and the Parent Group were computed and compared by a t-test at the .05 level to determine if there was a significant difference among the means. The means of the Faculty Group were reported separately. Open-ended questions were recorded and percentages were calculated for each category of response.

Using letter grades (A to F), percentages were calculated on the number of ninth grade students (1993-94) passing first semester Algebra 1 and English 1 classes. These grades were compared with percentages of passing grades for last year's (1992-93) freshman class that did not participate in Upward Bound.

CHAPTER III

PRESENTATION, DISCUSSION, AND ANALYSIS OF RESULTS

Data Source Characteristics

This study examined the attitudes of the customers of Upward Bound: ninth grade Upward Bound students, their parents, and faculty of Tomball Senior High School. Their opinions and the students' academic performance were used as assessment tools to report on the effectiveness of the Upward Bound program. Because there are different variables impacting the problem, this study investigated them from several perspectives as outlined in the research questions.

Figure 1 Student Group Response Rate

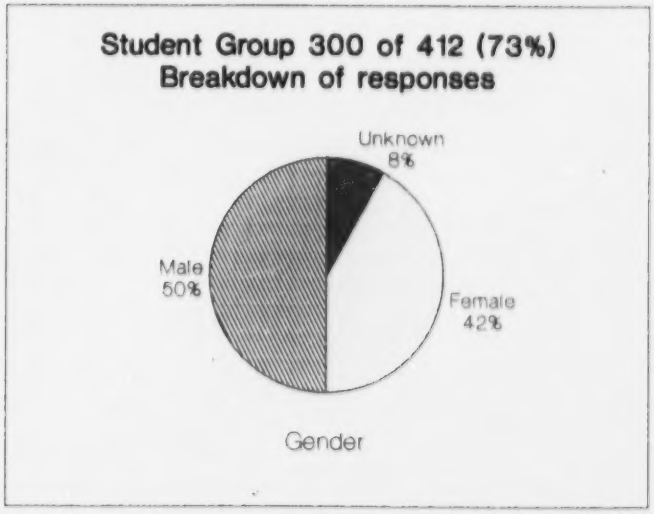


Figure 2 Parent Group Response Rate

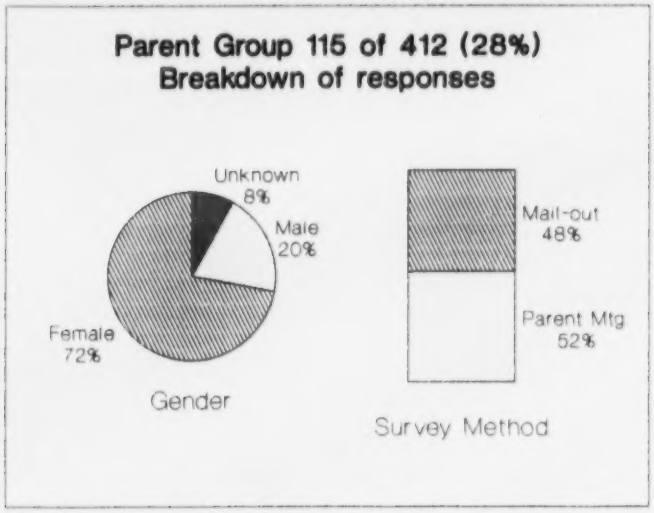
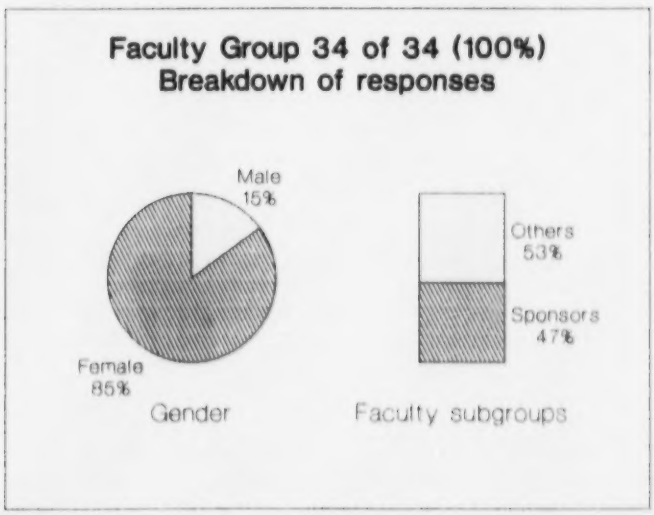


Figure 3 Faculty Group Response Rate



RESEARCH QUESTION #1

DID CUSTOMERS UNDERSTAND THE PURPOSE OF UPWARD BOUND?

Likert-type statements one and two provide data to analyze this research question.

1. School explained Purpose of Upward Bound.

2. I understand the purpose of Upward Bound.

Parent Group

One half of the parents (3.05) reported that the purpose of the program had been explained to them and almost the same number (3.02) said they understood the purpose of the program.

Student Group

Mean scores for students were 3.24 and 3.09, indicating more students than parents had the program explained to them and understood it.

t-test

An analysis of the t-test for question one showed no statistically significant difference in the two means (t=.8, p=1.98).

Faculty Group

Fifteen of 16 Upward Bound sponsors either strongly agreed or agreed that the program was explained to them. This number compares to 12 of 17 of other faculty. Regarding whether faculty understood the purpose of the program, a distinct difference between the mean scores of sponsors (4.06) and non-sponsors (3.29) was found.

Table 1 Comparison Group Analysis: Research Question #1

DID CUSTOMERS UNDERSTAND THE PURPOSE OF UPWARD BOUND?

1. School explained purpose of Upward Bound.

	SA	A	U	D	SD	MEAN
Parents %	5	50	9	18	18	3.05
Students %	12	45	14	18	10	3.24

t=.8 p=1.98

All Faculty	3	24	2	4	0	3.79
Sponsors	3	12	0	1	0	4.06
Other Faculty	0	12	2	3	0	3.52

2. I understand the purpose of Upward Bound.

	SA	A	U	D	SD	MEAN
Parents %	6	42	18	20	14	3.02
Students %	12	41	15	12	20	3.09

All Faculty	4	19	5	5	0	3.67
Sponsors	3	11	2	0	0	4.06
Other Faculty	1	8	3	5	0	3.29

SA-Strongly Agree
A-Agree
U-Undecided
D-Disagree
SD-Strongly Disagree

Parents (N=115)
Students (N=300)

All Faculty (N=33)
Sponsors (n=16)
Other Faculty (n=17)

RESEARCH QUESTION #2

DID UPWARD BOUND HAVE A POSITIVE IMPACT ON ESTABLISHING MUTUAL EXPECTATIONS BETWEEN SCHOOL, STUDENT AND HOME?

The analysis of this research question involved Likert-type statements 3, 6, and 13.

3. Upward Bound helped to establish mutual expectations.

6. Since Upward Bound, communication has improved.

13. Expectations are understood.

Parent and Student Groups

When the means for statements 3, 6, and 13 are averaged, results show that parents (2.12) and students (2.33) were either undecided, or did not feel that the program had a positive impact on communication.

t-test

The t-test for statements 6 (t=.52, p=1.98) and 13 (t=.179, p=1.98) showed no significant difference between the means.

Faculty Group

Means for statements 3, 6, and 13 were also averaged for faculty groups. The results show that sponsors (2.96) and other faculty (2.86) were either undecided or disagreed that Upward Bound had helped to improve communication.

Table 2 Comparison Group Analysis: Research Question #2

DID UPWARD BOUND HAVE A POSITIVE IMPACT ON ESTABLISHING MUTUAL EXPECATIONS BETWEEN SCHOOL, STUDENT AND HOME?

3. Upward Bound helped to establish mutual expectations.

	SA	A	U	D	SD	MEAN
Parents %	1	6	29	36	28	2.10
Students %	4	13	24	28	31	2.30

All Faculty	0	5	17	9	2	2.75
Sponsors	0	4	7	4	1	2.87
Other Faculty	0	1	10	5	1	2.64

6.Since Upward Bound, communication has improved.

	SA	A	U	D	SD	MEAN
Parents %	1	2	20	41	36	1.94
Students %	4	7	22	29	38	2.11

t=.52, p=1.98

All Faculty	0	2	20	10	1	2.69
Sponsors	0	2	9	4	1	2.75
Other Faculty	0	0	11	6	0	2.64

13. Expectations are understood.

	SA	A	U	D	SD	MEAN
Parents %	4	11	20	33	32	2.27
Students %	6	19	29	21	25	2.61

t=1.79, p=1.98

All Faculty	3	11	13	4	2	3.58
Sponsors	3	2	8	2	1	3.87
Other Faculty	0	9	5	2	1	3.29

Parents (N=115)
Students (N=300)

All Faculty (N=33)
Sponsors (n=16)
Other Faculty (n=17)

RESEARCH QUESTION #3

DID STUDENTS APPLY WHAT WAS TAUGHT IN UPWARD BOUND IN OTHER CLASSES?

Only students and faculty were asked to check a list of skills taught in Upward Bound.

Student Group

Based on the self-reporting method used in the checklist of skills, note-taking was applied most and interpersonal skills least in other classes. Three percent of the students expressed the opinion (unsolicited comments next to the checklist) that they already had the skills.

Table 3 Percentage of Skills Applied in Other Classes

SKILL APPLIED*	SPONSORS	OTHER FACULTY	STUDENTS
	%	%	%
Notetaking	69	50	63
Interpersonal skills	69	47	30
Managing time	25	25	50
Test taking	62	35	50
Presenting in class	81	30	43
Reading	50	30	43
Working in groups	81	48	50

* Groups could check all or none of the skills.

Faculty Group

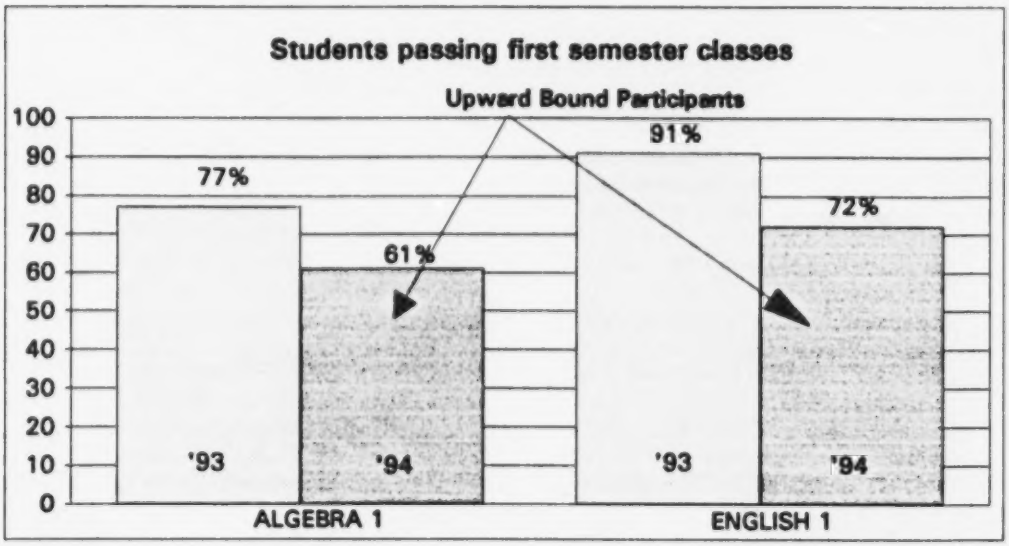
Sponsors reported observing a greater percentage of skills being applied than other faculty in almost every skill except managing time, where both faculty groups agreed that students used this skill the least.

RESEARCH QUESTION #4

TO WHAT EXTENT WAS UPWARD BOUND EFFECTIVE IN IMPROVING STUDENT PERFORMANCE?

When comparing (Figure 4) the first semester grades in Algebra 1 and English 1 classes of two groups of freshmen students ('93 vs. '94), no improvement was realized. That is, students who participated in Upward Bound in 1994 did not do better than freshmen in 1993 in core subjects who did not participate in the program. This analysis is a comparison of two different groups in which no controls were devised to eliminate outside influences. However, these grades do reflect a measure of student performance.

Figure 4 Students Passing First Semester Classes



RESEARCH QUESTION #5

WHAT WAS THE REACTION OF CUSTOMERS TO UPWARD BOUND AND ITS ACTIVITIES?

The analysis of this research question involves all of the open-ended survey questions (with the exception the question, What is the least benefit of Upward Bound? It was omitted as sufficient and redundant data was obtained from other questions) and the following Likert-type statements grouped by issue: 4, 7, & 9 (concept of academic advisory); 5 & 8 (overall reactions); 10 & 11 (improvement in skills/knowledge), and 12, 14, & 15 (future planning).

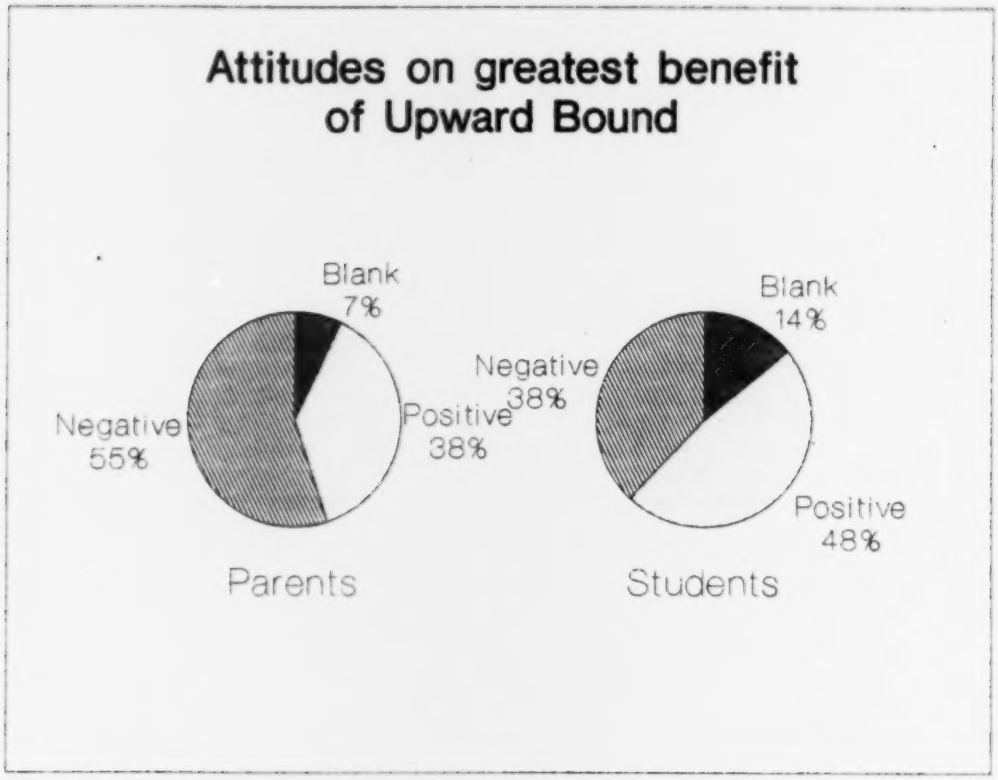
What do you see as the greatest benefit of Upward Bound?

Parent Group

The responses (Figure 5) of parents (38%) with a positive attitude include the following:

1) time to do homework/to get help on doing it (51%);
2) felt positive about the study skills and interpersonal skills for students with low self-esteem (20%).
3) liked the concept of Upward Bound (13%); and
4) these others: better self-esteem, how to use the library, knowing the logistics of the school, and understanding that each person learns differently (16%).

Figure 5 Attitudes of Parents and Students on Greatest Benefit of Upward Bound



Student Group

The responses (Figure 5) of students (48%) with a positive attitude include the following:

1) chance to do homework (45%);
2) study skills taught (45%);
3) good time to get together with freshmen (6%); and
4) earn a credit (4%).

Faculty Group

The sponsors comments on the *greatest benefit* of Upward Bound showed a variety of opinions:

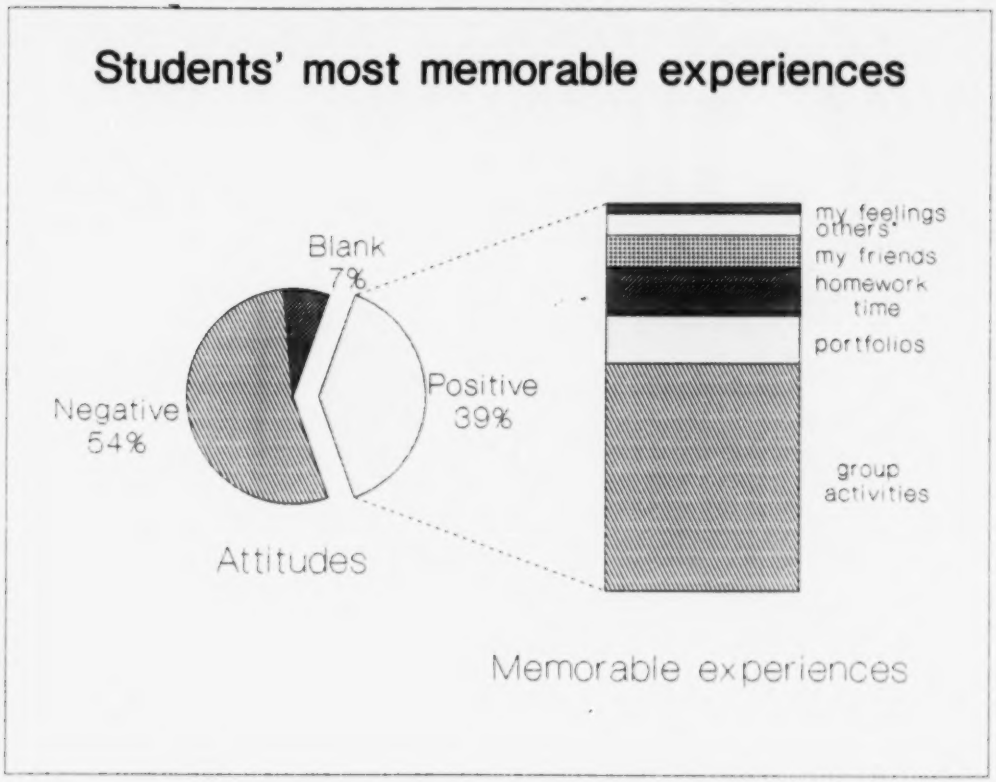
1) group cohesion;
2) chance for students to learn new skills if they choose;
3) the "I'm Wonderful" Portfolios;
4) opportunity to enhance skills and learn about themselves;
5) the group work enjoyed by kids;
6) time to reflect and to stop pure academic work;
7) fun, low stress activities; and
8) dealt with issues pertinent to freshmen.

Other faculty shared these feelings on the *greatest benefit*:

1) the concept of academic advisory;
2) skills applied to other classes;
3) teaching students the value of studying;
4) group work;
5) interpersonal skills taught;
6) opportunity for teachers to be counselors; and
7) chance to adjust to high school organization.

"My most memorable experience in Upward Bound was..."

Figure 6 Attitudes of Students on Most Memorable Experience in Upward Bound



* Other memorable experiences were: meeting new people, learning to take notes, watching plays and movies, mental walk through the school, and the nice teacher.

Among the most popular group activities reported by students were the following:

1) presentations;
2) 12 Intelligent Behaviors;
3) activities dealing with the senses;

4) persistence activities and phone games;

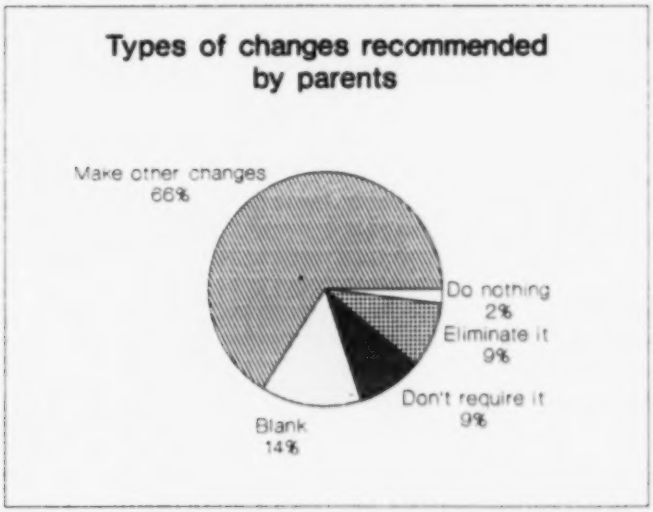
5) class flag project and door decorating contest;

6) team building exercises outdoors (standing on a board) and indoors (building a tower of desks); and

7) skits to teach others about the student handbook.

The one thing I would change about Upward Bound is..."

Figure 7 Attitudes of Parents on Changing the Program



Parent Group

Among the other changes (66%) suggested were the following:

1) make it a class for low achievers & pre-screen for those who need it;

2) reduce the time spent on not doing anything;

3) stop the constant bureaucracy;

4) challenge students more;

5) make it only one semester;

6) use mentors from outside;

7) improve teachers' attitudes; and

8) make it correlate more to current classes.

Faculty Group

Sponsors' responses to "...*what I would change...*" are a blueprint for improvement. Among the responses were the following:

1) have curriculum set before school starts;

2) plan more and schedule students into teams;

4) shorten class time;

5) structure lessons more and add objectives;

6) improve grading system;

7) motivate students ahead of time;

8) change negative perception;

9) be more unified on expectations;

10) be more consistent among teachers;

11) group students into skill levels;

12) relate more to current classes; and

13) do more career awareness activities.

Almost one half (n=7) of the other faculty responded to this question. Among the responses were the following:

1) change the attitudes of teachers and students;

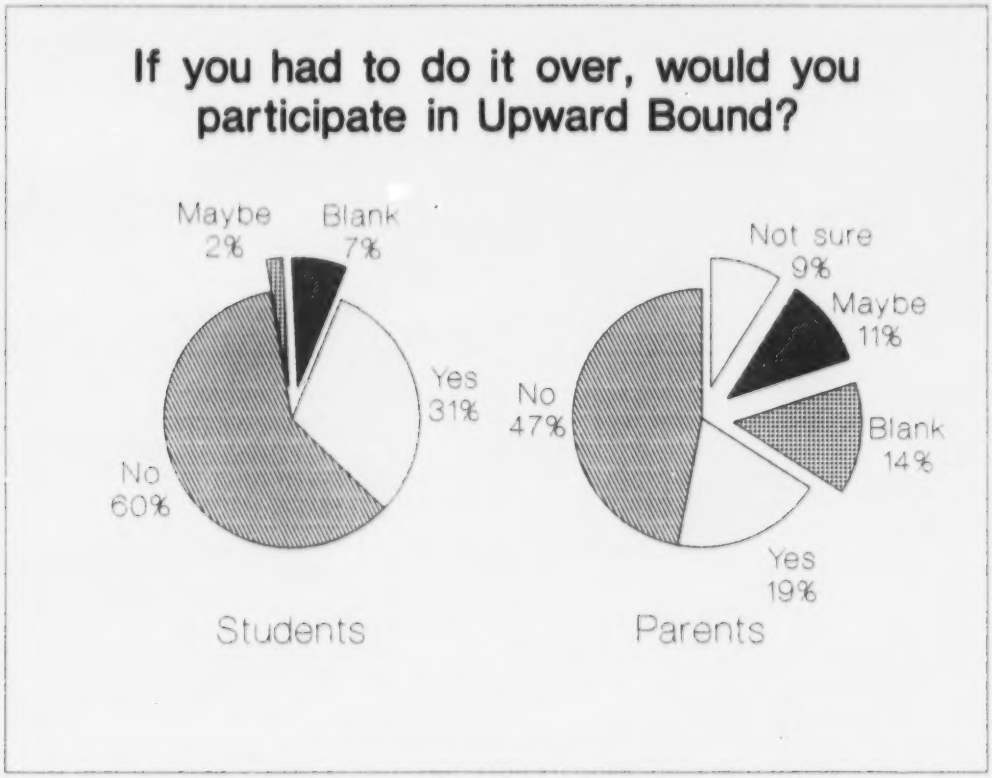
2) increase students' level of involvement;

3) team teachers; and

4) plan a more definite curriculum.

If you had to do it over, would you want to participate in Upward Bound? If no, why not?

Figure 8 Attitudes of Parents and Students on Whether They Would Paticipate Again



Parent Group

Parents (47%) with a negative attitude expressed these comments:

1) prefer another content subject to prepare for college (24%);
2) waste of time (23%);
3) my child already has these skills, or has mastered them (11%);

4) was basically a study hall (9%);
5) no purpose or goals (9%);
6) lack of teacher planning and supervision (6%); and
7) these others: no results or benefits, not a school function, son displeased, school shouldn't be all fun and games, extra sleeping time, teach these skills in the lower grades (18%).

The parents (19%) who would want their child to do it over again felt positively about the idea of teaching study skills and interpersonal skills and the time to study.

Among the conditional responses (11%) of parents were the following:

1) not unless greatly improved;
2) not under this structure;
3) idea is good but something is not working;
4) good idea but no follow through;
5) if I knew more about it;
6) if it was what it was presented to be;
7) if more challenging;
8) if less time for sleep; and
9) if more organized.

If you had to do it over, would you want to participate in Upward Bound? If no, why not?

Student Group

The negative responses (60%) of students as shown in Figure 7 are as follows:

1) said it was boring, dumb, or didn't like it (51%);
2) preferred another content elective other than Upward Bound (27%);
3) didn't learn anything (16%); and
4) already had the skills (6%);

The positive responses (31%) are as follows:

1) I liked the activities (34%);
2) time to do homework; (34%);
3) fun (16%);
4) an easy class (8%); and
5) being with friends (8%).

Issue: Concept of Academic Advisory

4. Take another elective instead of Upward Bound.

7. I like a class that improves interpersonal skills.

9. Skills taught can help students do better.

Parent and Student Groups

Statement four yielded mean scores for parents (3.68) and students (3.64) at a rate that implies more than one half of them prefer another content elective over academic advisory. More parents (3.70) than students (2.99) favored the idea of a class that improves interpersonal skills. On statement nine, the opinions of parents (2.70) and students (2.71) were either undecided, or disagreed that the skills taught could help students do better.

t-test

Statement seven was analyzed using the t-test and no significant difference was found between the means (t=1.97, p=1.98).

Faculty Group

On statement four, both faculty groups were evenly split (mean of 3.0 for sponsors and 3.11 for other faculty) over the issue of students' taking another elective instead of Upward Bound. Average means of 4.24 and 3.87 on statement 7 and 9 showed that both faculty groups tended to agree that academic advisory can be beneficial.

Table 4 Comparison Group Analysis: Research Question #5

WHAT WAS THE REACTION TO UPWARD BOUND AND ITS ACTIVITIES?

Issue: Concept of Academic Advisory

4. Take another class instead of Upward Bound.

	SA	A	U	D	SD	MEAN
Parents %	41	16	26	11	6	3.68
Students %	42	16	16	14	12	3.64

All Faculty	3	9	10	9	2	3.05
Sponsors	1	5	4	5	1	3.00
Other Faculty	2	4	6	4	1	3.11

7. I like a class that improves interpersonal skills.

	SA	A	U	D	SD	MEAN
Parents %	30	40	10	5	15	3.70
Students %	11	29	27	13	20	2.99

t=1.97, p=1.98

All Faculty	13	15	4	1	0	4.21
Sponsors	8	6	2	0	0	4.37
Other Faculty	5	9	2	1	0	4.05

9. Skills taught can help students do better.

	SA	A	U	D	SD	MEAN
Parents %	5	17	43	17	19	2.70
Students %	4	24	22	22	24	2.71

All Faculty	7	18	6	2	0	3.91
Sponsors	4	10	2	0	0	4.12
Other Faculty	3	8	4	2	0	3.70

Parents (N=115)
Students (N=300)

All Faculty (N=33)
Sponsors (n=16)
Other Faculty (n=17)

Issue: Overall feedback on Upward Bound:

5. Students liked working in a group.

8. Students give positive feedback about Upward Bound

Parent and Student Groups

Slightly more students (2.84) than parents (2.56) said they liked working in a group. Most parents (2.00) reported receiving little or no positive feedback from their children about the program. Students reactions were mixed (2.58) on whether they felt good about the program.

t-test

No significant difference was found between the means for statements five (t=1.58, p=1.98) and eight (t=1.96, p=1.98).

Faculty Group

Ten of 16 sponsors felt that students liked working in a group (3.5), while most other faculty were undecided (3.11).

On statement 8, only 5 of 16 sponsors and 1 of 17 other faculty received positive feedback from students.

Table 5 Comparison Group Analysis: Research Question #5

WHAT WAS THE REACTION TO UPWARD BOUND AND ITS ACTIVITIES?

Issue: Overall Feedback

5. Students liked working in a group.

	SA	A	U	D	SD	MEAN
Parents %	1	23	30	22	24	2.56
Students %	16	29	22	17	16	3.10

All Faculty	2	12	13	6	0	3.30
Sponsors	2	8	2	4	0	3.50
Other Faculty	0	4	11	2	0	3.11

8. Students give positive feedback about Upward Bound.

	SA	A	U	D	SD	MEAN
Parents %	3	11	13	30	43	2.03
Students %	5	21	27	21	26	2.58

All Faculty	0	6	7	17	3	2.49
Sponsors	0	5	3	7	1	2.75
Other Faculty	0	1	4	10	2	2.23

Parents (N=115)
Students (N=300)

All Faculty (N=33)
Sponsors (n=16)
Other Faculty (n=17)

Issue: Improved skills and knowledge

10. Helped students develop interpersonal skills.

11. Helped students understand how they learn best.

Parent and Student Groups

When combining statement (10 and 11) and comparing the average means of parents (2.43) and students (2.65), less than one fourth (8% & 18%, respectively) felt that the program had made an impact on interpersonal skills or in the area of understanding how one learns best.

Faculty Group

In statement 10, 9 of 15 sponsors and 12 of 17 other faculty were undecided. More than one half (n=10) of the sponsors either strongly agreed or agreed that the program helped students understand how they learn best. Again, most other faculty (n=10) responded that they were undecided.

Table 6 Comparison Group Analysis: Research Question #5

WHAT WAS THE REACTION TO UPWARD BOUND AND ITS ACTIVITIES?

Issue: Improved skills and knowledge

10. Upward Bound helped develop interpersonal skills.

	SA	A	U	D	SD	MEAN
Parents %	1	9	42	25	23	2.40
Students %	6	14	29	24	27	2.46
All Faculty	1	7	21	3	1	3.12
Sponsors	1	5	9	0	1	3.31
Other Faculty	0	2	12	3	0	2.94

11.Upward Bound helped to understand how they learn best.

	SA	A	U	D	SD	MEAN
Parents %	2	15	35	23	25	2.40
Students %	7	33	18	19	23	2.85
All Faculty	2	12	13	6	0	3.30
Sponsors	2	8	3	3	0	3.56
Other Faculty	0	4	10	3	0	3.05

Parents (N=115)
Students (N=300)

All Faculty (N=33)
Sponsors (n=16)
Other Faculty (n=17)

Issue: Future Planning

12. More time exploring careers needed.

14. Learn more about graduation requirements.

15. Fish camp helped students do better in school.

Parent and Student Groups

Most parents (2.27) disagreed that more time is needed exploring careers, while students felt the opposite (3.37). Both parents (3.58) and students (3.55) are interested in learning more about graduation requirements.

Fish Camp (statement 15) received the support of more than one half of parents (3.58) and less than one half of students (2.56).

t-test

A t-test for statement 15 was done showing a statistically significant difference of opinion between the parents and students.

Faculty Group

A majority of all faculty (n=25) surveyed in the study either agree or strongly agree that more time should be spent on career exploration and more information given on graduation requirements (statement 12 and 14).

Almost all sponsors (n=13) thought Fish Camp benefited students, while most of the other faculty (n=11) either were undecided or felt there was no benefit.

Table 7 Comparison Group Analysis: Research Question #5

WHAT WAS THE REACTION TO UPWARD BOUND AND ITS ACTIVITIES?

Issue: Future Planning

12. More time exploring careers needed.

	SA	A	U	D	SD	MEAN
Parents %	3	11	20	34	32	3.39
Students %	21	31	25	11	12	3.37

All Faculty	9	14	4	5	0	3.27
Sponsors	5	7	1	3	0	3.87
Other Faculty	4	7	3	2	0	3.70

14. I want to learn more about graduation requirements.

	SA	A	U	D	SD	MEAN
Parents %	40	37	5	11	7	3.86
Students %	26	35	17	11	11	3.55

All Faculty	6	20	3	4	0	3.84
Sponsors	4	9	0	3	0	3.87
Other Faculty	2	11	3	1	0	3.82

15. Fish camp helped students do better in school.

	SA	A	U	D	SD	MEAN
Parents %	30	30	24	6	10	3.58
Students %	14	15	22	12	37	2.56

t=3.09, p=1.98

All Faculty	6	13	8	6	0	3.43
Sponsors	3	10	0	3	0	3.81
Other Faculty	3	3	8	3	0	3.35

Parents (N=115)
Students (N=300)

All Faculty (N=33)
Sponsors (n=16)
Other Faculty (n=17)

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of the Study Results

Using a survey questionnaire and comparison group analysis, this study assessed the attitudes of three customer groups who participated in a newly instituted academic advisory program, Upward Bound, at the secondary school level. Secondly, it provided a baseline of data from which to measure the effects of the program on students' academic performance.

The customers, 300 of 412 freshmen students, 115 of their parents, and all 33 fulltime faculty who taught primarily freshmen (16 who volunteered as academic advisory sponsors and 17 others) responded to a researcher-developed, five point, Likert-type scale which contained 15 statements. Open-ended questions were also included.

Research Questions

1. **Did customers understand the purpose of Upward Bound?**

   About one half of parents and students reported they understood the purpose of the program. Most sponsors understood the purpose of the program and about 75% of other faculty reported they did.

2. **Did Upward Bound have a positive impact on establishing mutual expectations between school, student and home?**

   Most customers reported that the program had little or no positive impact on improving communication.

3. **Did students apply what was taught in Upward Bound in other classes (English, math and science)?**

   Both students and faculty agreed that note-taking skills were applied most in other classes. Students said they also applied other skills (interpersonal skills time management, test taking and working in groups). Sponsors reported observing a greater percentage of skills being applied than other faculty. All faculty agreed that managing time was applied least.

4. **To what extent was Upward Bound effective in improving student performance?**

   No improvement in first semester grades in Algebra 1 and English 1 courses was realized as a result of Upward Bound. The passing rate for the Class of 1997 (Upward Bound participants) was 61% in Algebra 1 and 72% in English 1. This percentage is a downward trend compared with the Class of 1996 (non-participants), whose passing rates were 77% and 91%, respectively.

5. **What was the reaction of customers to Upward Bound and its activities?**

Students and parents had similar opinions and were almost evenly split in their opinions. The only significant difference between the means dealt with Fish Camp, where parents felt it was helpful. Group activities were popular. While study hall helped some, it was not viewed positively by parents and students who preferred another content elective. Sponsors tended to be the most positive about Upward Bound, recognized the weaknesses and had a strategy for improving the program. Other faculty were slightly less favorable and seemed to know less than sponsors.

Conclusions

The aim of this study was not to determine the effects of an academic advisory program on the students' performance in school using quantifiable data. This research was an inquiry assessment, or customer satisfaction poll, concerning people's opinions about a new program. Secondly, because of the comparison group analysis, evidence was collected to discuss the effectiveness of the program.

In this first and important step of assessing the customers' feedback, the following patterns and findings emerged:

1. Parents & Students Agreed on Many Issues

Parents knew the least about the benefits and activities of the program, and showed the least satisfaction. Students were more favorable toward Upward Bound, but the differences between means were not significant in 14 of 15 Likert-type statements.

2. Communication was Weakest Component

The weakest component of Upward Bound was communication between school, student and home. As a whole, not one group thought that communication had improved over the course of the first semester. Almost one half of the parents claimed they didn't know or understand the purpose of the program. It appears that the scheduled activities for parents were not sufficient to obtain the support (for Upward Bound) from many parents. This lack of support may have led to speculation as to the intended purpose of Upward Bound.

3. Benefits by Many Were Reported

All groups reported benefits, although more than one half of parents and students responded negatively. Parents and students named homework time/study hall, study skills and interpersonal skills learned as greatest benefits. Sponsors agreed on these benefits and added an intangible one, group cohesion.

4. Sponsors' Commitment To improvement a Strength

Sponsor feedback was critical in this assessment. Their insight and opinions on what they would change is a blueprint for improvement. Overall, other faculty seemed to

know less about the program than did sponsors, but did offer concrete suggestions on how to improve the program.

5. Parents Agree on the Concept Only

Parents liked the idea of a class that improves their children's interpersonal skills, but did not agree, or were undecided, that the topics taught in Upward Bound could help them do better academically. Mant parents preferred another content course to prepare them for college, felt the program should be optional rather than compulsory and is better suited for students with low self-esteem.

6. Group Activities Popular Among Students

Of those listing a memorable experience, group activities were rated most popular, followed by study hall/homework time and the "I'm Wonderful" Portfolio.

7. Homework Time Unappreciated by Many

Many students seemed to fall short of possessing the maturity to use the study time wisely and, therefore, wasted time (as their parents stated). Study hall carried a negative connotation for all customer groups.

8. Baseline of Academic Performance Set

No gains in grades were realized in the comparison of two different groups of students; however, a baseline is established for use in the future. The relationship between learning new skills, applying them, and improving grades did not materialize during the first semester of the 1993-94 school year.

Recommendations

It is apparent that Upward Bound was an ambitious initiative that provided some benefits in its pilot year; however, steps must be taken to ensure a higher rate of approval from customers in the future. These steps include:

1. Share the findings of this survey with the customer groups and use it as a starting point to discuss strategies.
2. Continue academic advisory as a required elective.
3. Follow these suggestions made by sponsors and parents on the survey:
    A. Using the team approach, develop a structured curriculum for each of the components; have it ready by the beginning of the semester.
    B. Select a text as a foundation for the curriculum.
    C. Consider teaming of sponsors and schedule planning time.
    D. Study the format of academic advisory to improve use of time.
    E. Provide special training for sponsors on conducting group activities.
    F. Plan and schedule orientations for incoming freshmen and their parents; use a variety of other methods to increase communication.
    G. Increase career awareness activities within academic advisory.

H. Provide briefings for all customers on new graduation requirements.

I. Repeat the all day student orientation next year for freshmen (Fish Camp).

4. Develop more support from other faculty for academic advisory.
5. Use the Key Practices of High School That Work as a guide; look for ways to link those practices with goals of Pathways and Upward Bound.
6. Be aware of new developments regarding evaluation models in use for Tech Prep for use locally.
7. Conduct periodic customer satisfaction surveys to assess the progress of the academic advisory, the Key Practices, Tech Prep, and other new programs.

Finally, it is the hoped that this research project helped to raised the awareness of all customers and stakeholders and helped Tomball Senior High School move one step closer toward producing a product that meets world class standards.

BIBLIOGRAPHY

Abramson, T., Tittle, C. & Cohen L. (Eds.) (1979). Handbook of vocational education evaluation. Beverly Hills: Sage.

Academic Excellence Indicator System (1992-93). District Report of Tomball Independent School District. Texas Education Agency: Austin.

Aśche, M., Strickland, & D. Elson (1992). Linking planning and evaluation in vocational education: Issues and concepts.(NCRVE Report No. MDS-270). Berkeley, CA: National Center for Research in Vocational Education.

Bottoms, G., Presson, A. & Johnson, M, (1992). Making high schools work through integration of academic and vocational education. Atlanta: Southern Regional Education Board.

Bottoms, G.,(1993). Redesigning and refocusing high school vocational studies. Atlanta: Southern Regional Education Board.

Bottoms, G., (1993). Comparative analysis for reading, math and science achievement of 1993 vocational completers from old and new high schools that work sites. Atlanta: Southern Regional Education Board.

Bottoms, G. (July, 1993). High schools that work site development conference: Texas Education Agency and SREB: Austin.

Bragg, D. (Ed.). (1992). Implementing Tech Prep: A guide to planning a quality initiative.(NCRVE Report No. MDS-241). Berkeley, CA: National Center for Research in Vocational Education.

Byrnes, M., Cornesky, R., & Byrnes, L. (1992). Implementing total quality management in the classroom. Bunnel, FL: Cornesky & Associates.

Commission on the Skills of the American Workforce. (1990). America's choice: High skills or low wages. Rochester, NY: National Center on Education and the Economy.

Decision Information Resources, Inc. (1993). Outline of the evaluation of tech prep implementation in Texas: Data collection and analysis plan. DIR, Inc. 2411 Smith St., Suite 200, Houston, TX 77006.

Dutton, M. (Nov., 1993). Informal interview on the state of evaluation of tech prep in the United States.

Elson, D. E., Dale, J. D., & Strickland, D.C. (1992). Strategies for linking planning and evaluation in vocational and technical education. (NCRVE Report No. MDS-235). Berkeley, CA: National Center for Research in Vocational Education.

Freiberg, H. J. & Driscoll, A. (1992). Universal teaching strategies. Boston: Allyn and Bacon.

Furey, S. (Sept., 1993). Informal interview on the state of tech prep in the United States.

Gardner, B. & Reinhard, B. (1991). Decision makers: Betsy Brand, Assistant Secretary for Vocational and Adult Education. Community, Technical, and Junior College Journal, 61(4), 12-14.

Greenan, J. & Jarwan, F. (1992). Indiana tech prep training manual division I: Indiana Department of Education. (ERIC ED 349417).

Hammons, F.T., Jr. (1992). The first step in Tech-Prep program evaluation: The identification of performance indicators. Dissertation Abstracts International, 53. (University Microforms No. AAC 9222306)

Herman, J. & Winters, L. (1992). A guide to sensible evaluation. Newburg Park: Corwin.

Hoachlander, E.G., (1991). Designing a plan to measure vocational educational results. Vocational Education Journal, 66(2) 20-21 & 65.

Hoachlander, E.G., Rahn M.L. (1992). Performance measures and standards for vocational education: 1991 survey results. (NCRVE Report No. MDS-388). Berkeley, CA: National Center for Research in Vocational Education.

Hoerner, J., Clowes, D., Lacowicz, T., Wehrley, J., & Hammons, F. (1992). Tech Prep: An embryonic idea and convergent practice.(NCRVE Report No. MDS-270). Berkeley, CA: National Center for Research in Vocational Education.

Madaus, G., Scriven, M. & Stufflebeam, D. (Eds.) (1983). Evaluation Models: Viewpoints on educational and human services evaluation. Boston: Kluwer-Nijhoff.

Master plan for career and technical education: Executive summary. (1993). Texas Education Agency, Texas Higher Education Coordinating Board and Texas Department of Commerce.

Mathematica Policy Research, Inc. (1993). National evaluation of the tech-prep education program summary. Mathematica Policy Research, Inc., P. O. Box 2393, Princeton, NJ 08553-2393.

Pedrotti, L. (Oct., 1993). Center for occupational research and development (CORD) Tech prep and applied academics-What's it all about?: Waco.

Parnell, D.(1985). The neglected majority. Washington, DC: Community College.

Presson, A. (Nov., 1993). Informal interview on SREB evaluation procedures of current sites.

Ross supports JTPA, but sees changes. (1993, Nov.). Vocational Education Weekly, VI(27), 4.

Saving America's children: Achieving international standards in American schools: A blueprint for change (1992). Presented by Associated Oregon Industries and National Association for Schools of Excellence. Portland: MEDIAmerica.

Secretary's Commission on Achieving Necessary Skills.(1991). What work requires of schools: A SCANS report for America 2000. Washington, DC: U.S. Department of Labor.

Strickland, D., & Asche, M. (1987). Enhancing utilization: a proposal for a modified utilization model for vocational education evaluation. Journal of Vocational Education Research, 12(4), 13-34.

Thurow, L. (1992). Head to head: The coming battle among Japan, Europe, and America. New York: Morrow.

U.S. Department of Labor and Education Report (1991). United States Printing Office. Washington, DC.

Wentling, T. L. (1975). Evaluating occupational education and training programs(2nd ed.). Boston: Allyn and Bacon.

Worthen, B.R., Sanders, J.,R. (1973). Educational evaluation: Theory and practice. Belmont, CA: Wadsworth.

APPENDIX A

Cover Letter & Student Survey

Tomball High School

13705 SANDY LANE
TOMBALL, TEXAS 77375-4300
(713) 357-3220 • FAX (713) 357-3248

January 13, 1993

Dear Tomball High School Freshman:

This is an anonymous survey dealing with your experience of Upward Bound. As a student, your opinions on Upward Bound are important in assessing the success of Upward Bound. A similar survey is being given to parents and teachers. The survey will take about 10 minutes.

Please take this opportunity to express your opinions to the questions on both sides of the paper.

Thank you for your time in completing this survey. Again, your responses will remain anonymous.

Stephen Koszewski

Stephen Koszewski
Tomball Senior High School

Tomball High School Class of 1997 Survey, January 1994

A. Sex: [ ] Male [ ] Female
B. Are you a 2nd year freshman? [ ] yes [ ] no

Read each statement below. Write-in the number on the line next to each statement that best matches your opinion.

5 Strongly Agree

4 Agree

3 Undecided

2 Disagree

1 Strongly Disagree

1. ___ The school has explained the purpose of Upward Bound to me.

2. ___ I understand the purpose of Upward Bound.

3. ___ Upward Bound helped to establish mutual expectations between school, student, and home.

4. ___ I should have taken another elective instead of Upward Bound.

5. ___ I liked working in a group in Upward Bound.

6. ___ Since Upward Bound, communication between school and home has improved.

7. ___ I like the idea of a class that improves students' interpersonal skills.

8. ___ I feel good about what I experienced in Upward Bound.

9. ___ The skills taught in Upward Bound can help me do better academically.

10. ___ Upward Bound has helped me develop interpersonal skills.

11. ___ Upward Bound helped me understand how I learn best.

12. ___ I would like to spend more time exploring careers in school.

13. ___ Upward Bound has helped me understand the expectations of Tomball High School.

14. ___ I would like to learn more about high school graduation requirements.

15. ___ Fish Camp helped me be better prepared for high school.

16. Below is a list of skills taught in Upward Bound class the first semester. Have you applied these skills in your classes (English, math, science, etc.)? Check YES or NO.

SKILLS	YES	NO
note taking	___	___
interpersonal skills	___	___
managing time	___	___
test taking	___	___
presenting in class	___	___
reading	___	___
working in groups	___	___

17. Complete this phrase.
"My most memorable experience in Upward Bound was..."

18. Complete this phrase.
"The one skill I now have that I didn't have before being in Upward Bound is..."

19. What do you see as the <u>greatest</u> benefit of Upward Bound? Why?

20. What do you see as the <u>least</u> benefit of Upward Bound? Why?

21. If you had to do it over, would you want to participate in Upward Bound?
If no, why not?

Thank you for completing this survey!

APPENDIX B

Cover Letter & Parent Survey

Tomball High School

13705 SANDY LANE
TOMBALL, TEXAS 77375-4300
(713) 357-3220 • FAX (713) 357-3248

January 14, 1993

Dear Parent or Guardian:

As you know, Tomball High School freshmen have just completed a one semester class called Upward Bound.

This is an anonymous survey (one per household) dealing with this new program. As a parent or guardian, your opinions on Upward Bound are important in assessing the success of Upward Bound. A similar survey is being given to students and their teachers. The survey will take about 10 minutes.

Please take this opportunity to express your opinions to the questions on both sides of the paper. Please mail the survey before January 21st in the self-addressed stamped envelope.

Thank you for your time in completing this survey. Again, your responses will remain anonymous.

Stephen Koszewski
Director of Grants and Research

Tomball High School Parent Survey, January 1994

A. Sex of Parent/Guardian completing survey: [ ] Male [ ] Female
B. Is your child a 2nd year freshman? [ ] yes [ ] no

Read each statement below. Write-in the number on the line next to each statement that best matches your opinion.

5 Strongly Agree

4 Agree

3 Undecided

2 Disagree

1 Strongly Disagree

1. ___ The school has explained the purpose of Upward Bound to me.

2. ___ I understand the purpose of Upward Bound.

3. ___ Upward Bound helped to establish mutual expectations between school, student, and home.

4. ___ My child should have taken another elective instead of Upward Bound.

5. ___ My child liked working in a group in Upward Bound.

6. ___ Since Upward Bound, communication between school and home has improved.

7. ___ I like the idea of a class that improves students' interpersonal skills.

8. ___ My child has given me positive feedback about Upward Bound.

9. ___ The skills taught in Upward Bound can help my child do better academically.

10. ___ Upward Bound has helped my child develop interpersonal skills.

11. ___ Upward Bound helped my child understand how she/he learns best.

12. ___ My child should spend more time exploring careers in school.

13. ___ Upward Bound has helped me understand the expectations of Tomball High School.

14. ___ I would like to learn more about high school graduation requirements.

15. ___ Fish Camp helped my child be better prepared for high school.

16. What do you see as the greatest benefit of Upward Bound?

17. What do you see as the least benefit of Upward Bound?

18. Complete this phrase. "The one thing I would change about Upward Bound is..." Why?

19. If you had to do it over, would you want your child to participate in Upward Bound? If no, why not?

Thank you for completing this survey! Please mail today.

APPENDIX C

Cover Letter & Faculty Survey

Tomball High School

13705 SANDY LANE
TOMBALL, TEXAS 77375-4300
(713) 357-3220 • FAX (713) 357-3248

January 17, 1993

Dear Tomball High School Faculty Member:

As you know, freshmen have just completed the one semester class called Upward Bound.

This is an anonymous survey dealing with this new program. As a teacher, your opinions on Upward Bound are important in assessing the success of Upward Bound. A similar survey is being given to freshmen and their parents. The survey will take about 10 minutes.

Please take this opportunity to express your opinions to the questions on both sides of the paper.

Thank you for your time in completing this survey. Again, your responses will remain anonymous.

Stephen K.

Stephen Koszewski
Tomball Senior High School

Tomball High School Faculty Survey, January 1994

A. Sex: [ ] Male [ ] Female
B. Are you an Upward Bound sponsor? [ ] yes [ ] no

Read each statement below. Write-in the number on the line next to each statement that best matches your opinion.

5 Strongly Agree

4 Agree

3 Undecided

2 Disagree

1 Strongly Disagree

1. ___ The school has explained the purpose of Upward Bound to me.

2. ___ I understand the purpose of Upward Bound.

3. ___ Upward Bound helped to establish mutual expectations between school, student, and home.

4. ___ Students should have taken another elective instead of Upward Bound.

5. ___ Students liked working in a group in Upward Bound.

6. ___ Since Upward Bound, communication between school and home has improved.

7. ___ I like the idea of a class that improves students' interpersonal skills.

8. ___ My students have given me positive feedback about Upward Bound.

9. ___ The skills taught in Upward Bound can help students do better academically.

10. ___ Upward Bound has helped freshmen students develop interpersonal skills.

11. ___ Upward Bound helped students understand how they learn best.

12. ___ Freshmen students should spend more time exploring careers in school.

13. ___ Students and parents understand the expectations of Tomball High School.

14. ___ I would like to learn more about high school graduation requirements.

15. ___ Fish Camp helped freshmen students be better prepared for high school.

16. Below is a list of skills taught in Upward Bound class the first semester. Have students applied these skills in your class (English, math, science, etc.) ? Check YES or NO.

SKILLS	YES	NO
note taking	___	___
interpersonal skills	___	___
managing time	___	___
test taking	___	___
presenting in class	___	___
reading	___	___
working in groups	___	___

17. What do you see as the <u>greatest</u> benefit of Upward Bound? Why?

18. What do you see as the <u>least</u> benefit of Upward Bound? Why?

19. Complete this phrase. "The one thing I would change about Upward Bound is..."

Thank you for completing this survey!